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ABSTRACT

This practicum project attempted to increase the identification of pre-K students at risk for a specific learning disability and to identify appropriate diagnostic procedures and assessment instruments. The project's objectives included increasing pre-K teachers' awareness of academic and behavioral indicators of a specific learning disability. Eleven students, 4 and 5 years of age, who were identified as severely language impaired (SLI), became the target population and were assessed for eligibility for the learning disability program using the following measures: the Developmental Indicators for the Assessment of Learning-Revised (to assess the areas of motor, concept, and language development); the Woodcock-Johnson Tests of Cognitive Ability-Revised (to assess processing abilities); and the Test of Early Math Ability-2 and the Test of Early Reading Ability-2 (to measure pre-academic growth in these areas). Over 80 percent of the subjects were found eligible for the learning disability program. Teachers increased their awareness and rated the specific assessment measures positively. Appendixes include forms for the pre/post SLI Survey of teachers, the pre-K SLI Activity Evaluation, and the pre-K SLI Interview. Includes 23 references. (DB)

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INCREASING THE IDENTIFICATION OF PRESCHOOL STUDENTS AT-RISK FOR A SPECIFIC LEARNING DISABILITY

by

Patricia A. Coston

A Practicum Report

Submitted to the Faculty of the Center for the Advancement of Education, Nova University, in partial fulfillment of the requirements for the degree of Master of Science

The abstract of this report may be placed in a National Database System for reference.

May, 1991

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Abstract

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The enactment of Public Law 99-457 mandates the development of early intervention services and programs for infants, toddlers and preschoolers who previously were not being served. This project was proposed to increase the identification of Pre-K students at-risk for a specific learning disability and to identify appropriate diagnostic procedures and assessment instruments. A review of recent literature focused on the following areas: identification issues regarding the implementation of PL 99-457, assessment practices and diagnostic instruments appropriate for preschool age students, and potential indicators of a specific learning disability. The target population consisted of eleven students, four and five years of age, who were identified as severely language impaired. The county level screening program included assessments, observations, interviews and a review of the cumulative record. The Developmental Indicators for the Assessment of Learning Revised (DIAL-R) was administered to provide information in motor, concepts, and language development. The Woodcock-Johnson Tests of Cognitive Ability-Revised measured the processing abilities of the target students. The Test of Early Math Ability-2 and the Test of Early Reading Ability-2 measured preacademic growth in the respective areas. Over 80 percent of the target population met the eligibility requirements for the specific learning disabilities program.

Authorship Statement

I hereby testify that this paper and the work it reports are entirely my own. When it has been necessary to draw from the work of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practice. I give this testimony freely, out of respect for the scholarship of other professionals in the field and in the hope that my own work, presented here, will earn similar respect.

Signed: _____
Student's name

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CHAPTER I

Purpose

The study was conducted in a county located on the southwest coast of Florida. The county is known for its climate, diverse cultural offerings and excellent educational programs. The county encompasses 587.3 square miles with a 1990 estimated population totaling 271,135. Approximately 27,000 students are enrolled in the school system which includes six senior high schools, six middle schools, nineteen elementary schools, three Exceptional Student Facilities, one Adult High School and one Vocational Technical Center. Student performance on both the Scholastic Aptitude Test and the American College Testing Program is consistently above the national average (Lanier, 1991).

The writer is a countywide teacher for the Specific Learning Disabilities (SLD) department with over ten years experience in the field. The department consists of a program specialist, two countywide teachers and approximately 110 staff members. Services are available for students Pre-Kindergarten (Pre-K)

through age 21. The delivery model includes part-time resource rooms, full-time SLD classrooms and full-time Language-Learning Disabilities (LLD) rooms.

The countywide teaching position is divided evenly between providing direct SLD services at two alternative high schools and assisting the professional staff throughout the department. The responsibilities include training teachers in the use of approximately twelve diagnostic instruments, reviewing test protocols submitted by the staff and maintaining accurate records of completion for individual staff members. The countywide teacher also monitors compliance with requirements for completing Individual Educational Plans (IEP) for all students who are currently receiving services, administers diagnostic evaluations and provides support and training to all SLD staff.

A critical issue for the SLD department this year evolved from the amendment of Public Law 94-142 (PL), the Education for the Handicapped Act. The 1986 amendment, PL 99-457 mandates the development of early intervention services and programs for infants,

toddlers and preschoolers who previously were not being served. During the 1990-91 school year, all states applying for PL 94-142 funds must provide a free and appropriate public education for all eligible handicapped children ages three through five. States not in compliance will lose funding (Bureau of Education, 1989).

The county definition of a Pre-Kindergarten exceptional student is:

> a student who is below five years of age on or before September 1, and has a sensory, physical, mental, or emotional condition which significantly affects the attainment of normal developmental milestones. (Bureau of Education, 1990:173)

Students are eligible for prekindergarten exceptional programs when they meet the eligibility criteria for a specific exceptionality. In other words, students ages three or four on or before September 1 of the school year, would be required to meet the SLD criteria in order to receive services from this program.

The State of Florida, Department of Education defines a specific learning disability as:

> a disorder in one or more of the basic psychological processes involved in

> understanding or in using spoken or written language. Disorders may be manifested in listening, thinking, reading, talking, writing, spelling, or arithmetic. Such disorders do not include learning problems which are due primarily to visual, hearing or motor handicaps, to mental retardation, to emotional disturbance, or to an environmental deprivation. (School Board of Sarasota County, 1990:115)

All students referred for the learning disabilities program receive an individual psychological evaluation to determine their level of intellectual functioning. The eligibility criteria also requires evidence of a disorder in both psychological processing and academic achievement. A standardized instrument is required to document whether the deficit exists in the visual, auditory, motor or language processing areas. For students within the Pre-K age group it must be shown that the level of preacademic functioning is significantly lower than the assessed level of intellectual functioning. This discrepancy is documented on tasks that assess the ability of the student to use listening, thinking, reading, talking, writing, spelling or arithmetic skills.

A report published by the Florida Department of Education (DOE), Bureau of Education for Exceptional Students, listed sixty counties in Florida with a lower prevalence rate of SLD identification and six counties with a higher prevalence rate. Although the target county has identified 6.64 percent of the student population as learning disabled, the number of identified SLD students within the three-to-five year-old group is extremely low (Soper, 1990). According to the Pre-K Class List for November, 1990, which included 148 students, only five students were identified as learning disabled. The Pre-K list included programs for students who are identified as Physically Impaired, Hearing Impaired, Emotionally Handicapped, Severely Emotionally Disturbed, Educable Mentally Handicapped, Profoundly Mentally Handicapped, Medically Fragile and Severely Language Impaired (SLI).

A further indication of the discrepancy throughout the state was reported by the DOE in September, 1990. Within then three-to-five year-old group, only 73 students were receiving SLD services part-time. The

numbers increase dramatically within the six-to-eleven year-old group with 32,040 students receiving part-time SLD services. Although the government has mandated that the preschool handicapped population be served, the problem lies in the difficulty encountered when attempting to identify a mild handicap with this age group. The SLD Program Specialist felt the discrepancy existed both within the target county and statewide, due to the following factors that impede preschool SLD identification: 1) preschoolers are often initially identified as speech or language disordered as it is easier to diagnose, 2) the developmental rate of preschool students is so varied that it is difficult to determine a disability versus a developmental delay, 3) the academic indicators, such as functioning two years below grade level, are not as readily apparent with preacademic skills, 4) there is a hesitancy to label a child at this age and concern regarding the appropriateness of the assessment instruments (Soper, 1990).

The National Joint Committee on Learning Disabilities (NJCLD) expressed concern regarding preschool children demonstrating "specific developmental delays or deficit patterns that often are early manifestations of learning disabilities" (NJCLD, 1985:2). They stated the critical period for intervention is during the preschool years as this time period has been shown to be the most effective time for both prevention and intervention (NJCLD, 1985). Within the preschool age-group they recognized, "learning disabilities frequently are manifested as specific deficits in language and speech development" (NJCLD, 1985:2).

In an additional study, Aram and Nation, as quoted by Wetherby (1985:3) reported similar evidence showing "sixty percent of children who displayed language disorders at a preschool level were found to be placed in special education classes during late childhood." The implications of these studies examining specific deficits in speech and language within the preschool age-group and resultant academic difficulties are

significant when reviewing the Pre-K class list for the county. The largest percentage of students under one classification, were identified as Severely Language Impaired.

The target population was selected based on the documented connection between developmental language disorders and later academic difficulties. The target group of students consisted of preschool students ages four and five who were receiving services for the severely language impaired. This program is a full-time, intensive remedial program for students displaying at least a two year delay in language and/or speech development. The focus of the program is to develop the skills necessary for functional communication, which in effect, provide the foundation for academic learning.

According to the Language and Speech Program Specialist, approximately 50 percent of the Pre-K SLI students are later identified as learning disabled. The general progression includes one or two years in Pre-K SLI, one year in kindergarten SLI and SLD

identification in first or second grade. This pattern of delayed SLD identification until after the student has been in school three or more years is in direct opposition to current research which stresses the importance of early identification and services. The county has identified approximately 64 Pre-K students as severely language impaired. Potentially, based on the percentage previously reported, over 30 students within this population may exhibit characteristics of a specific learning disability and currently are not receiving services.

The enactment of Public Law 99-457 has created concern both within the SLD department and nationwide, regarding preschool identification and services for all handicapped children ages three through five. Current research supports early intervention and identification to enhance the developmental and educational gains of the student. This project was proposed to increase the identification of Pre-K students with a potential learning disability, identify appropriate diagnostic procedures and assessment instruments and provide

suggestions for increasing staff awareness of academic and behavioral indicators of students at risk for a learning disability. It is anticipated that:

1. The SLI preschool teachers, using critical thinking skills and problem solving strategies will demonstrate a 25 percent increase in awareness of the academic and behavioral indicators of a specific learning disability. This will be measured by an informal survey at the beginning and end of the implementation period (Appendix A:51).

2. Over a period of three months, 50 percent of the referred preschool SLI students will meet the eligibility criteria for the Specific Learning Disabilities program based on performance on the selected diagnostic instrument and the established criteria for the county.

3. Approximately 80 percent of the partipants involved, including the SLI teachers, LSH and SLD Program Specialists and the second countywide teacher will determine, by completing an informal survey, that

the practicum was educationally beneficial for both classroom and countywide purposes (Appendix B:53).

4. An informal survey will show that over 80 percent of the participants agree the DIAL-R is appropriate to identify preschool SLI students at-risk for a learning disability (Appendix B:53).

CHAPTER II

Research and Solution Strategy

A review of the recent literature focused on the following areas: identification issues regarding the implementation of PL 99-457, assessment practices and diagnostic instruments appropriate for preschool age students and potential indicators of a specific learning disability.

A study conducted by Doyle, Good, Kaminski and Schwarz at the University of Oregon (1990) attempted to identify kindergarten and first grade students at-risk for reading problems through curriculum-based measurement (CBM) of pre-reading skills. The study involved 13 language delayed kindergarten children, four and five years of age. Three measures of reading skills that were repeatedly assessed during the six week period included letter naming, number naming and picture naming fluency. The results indicated that curriculum-based measures were effective in documenting growth that had taken place during this time. The authors stated that further research was necessary to

determine if curriculum-based measures identify students at-risk for reading difficulties.

Designing a preschool screening program that focuses on the areas found in the existing county kindergarten screening program was a potential solution for increasing SLD identification. Current screening of all students K-3 includes a behavior observation, a health screening and the individually administered Developmental Tasks for Kindergarten Readiness (DTKR). When a student appears to be at-risk, the classroom teacher is required to document two strategies that have been used to remediate the problem and to review the progress mid-and-end of the year. Increasing identification of preschoolers at-risk would be facilitated by referring students for further evaluation based on the information gathered during the screening. According to the Program Specialist for Elementary Education, the information obtained from the kindergarten screening was generally not used to refer students to Exceptional Student Education (White, 1991).

In 1985 the National Joint Committee on Learning Disabilities recommended eight procedures to follow when attempting to identify preschool learning disabled children. These included, "systematic identification for all preschool children, . . . assessment procedures should be based on an interdisciplinary approach, . . . and early intervention programs should be available to all preschool children . . ." (NJCLD, 1985:7). During the screening procedure, students whose scores indicate they are at-risk should be thoroughly evaluated in the following areas: sensory functions, motor functions, cognition, communication and behavior. Incorporating the principles listed above and evaluating students in the specified areas would potentially increase SLD identification within the preschool age-group.

An important component of increased SLD identification is dependent on the ability of the teacher to accurately identify and refer students at-risk. An alternate solution would focus on increasing staff awareness. A survey conducted in Pennsylvania, by Anderson and Coleman (1985), focused on teachers'

understanding of learning disabilities and their level of preparation to work with these students. The results of the 135 teachers polled showed that although 82 percent of the teachers had identified or referred a student for a learning disability, only 21 percent felt they understood the nature of the disability. Requiring teachers to effectively teach or identify students with this level of understanding raises concern over the methods currently used to identify the students. Suggestions were provided for refining the definition of a learning disability to eliminate general confusion, and for school districts to assume more responsibility in sharing current information through workshops and inservice activities, regarding the nature and needs of the SLD student.

The primary factors that impede preschool identification, according to Bailey and Wolery (1989) are: limited understanding of the way children grow and develop, the lack of appropriate assessment instruments, the unique qualities of preschool children that create difficult testing situations and the lack

of experience professionals have in evaluating this population. A review of diagnostic instruments appropriate for the preschool age-group included the following instruments: American Guidance Service (AGS) Early Screening Profile developed by P. Harrison, the Developmental Indicators for the Assessment of Learning-Revised (DIAL-R) by D. Goldenburg and C. Mardell-Czudnowski and The Miller Assessment for Preschoolers (MAP) by L. J. Miller.

The AGS is a nationally normed screening battery for ages 2 years 0 months through 6 years 11 months. Three areas of the profile that are individually administered include the Cognitive/ Language Profile, the Motor Profile and the Articulation Survey. Parents and professionals complete three questionnaires: Self-Help/Social Profile, Home Survey and the Health History Survey. The estimated testing time is fifteen to thirty minutes for the profiles, and ten to fifteen minutes for the questionnaires. The method of presenting the items is an easel format except for the

motor subtest. The materials provided for the motor subtest include beads and string, and a tape measure.

The use of a two-level scoring system provides flexibility in determining the most appropriate information. Level I scoring is easily obtained and provides indicators of below average, average, or above average performance. Level II scoring provides standard scores, national percentile ranks, stanines and age equivalents. The authors report acceptable levels of reliability, validity and include extensive information regarding the development and standardization.

The AGS manual presents suggestions for conducting screenings that would easily facilitate the training of both professionals and paraprofessionals. The manual includes blackline masters that present an overview of the test, possible arrangements for the testing rooms and stations, guidelines for testing young children and information for scoring the profiles and surveys.

The next assessment instrument reviewed, the DIAL-R, is an individually administered screening test, appropriate for children ages two to six years old.

The test is designed to screen large groups of students in a relatively short period of time. The areas assessed include motor, concepts and language skills. The materials consist of five DIAL-R dials which are mounted on stands, and designed for use in three stations. The examiner exposes the test items by rotating the dial, which may be used to test over twenty items. Each station has a color-coded booklet providing specific instructions for each activity. Recommendations are made in each DIAL-R area for entering and exiting a student based on their respective age and performance. The examiner also records behavior observed during the administration. Administration time is approximately twenty to thirty minutes and would require limited training of the examiners.

The combined score for all three areas identify a student as a "Potential Problem," "OK," or "Potential Advanced." Students scoring at either end would be referred for further evaluations. The behavioral observations are tabulated but not included in the

total score. The manual noted that increases in the total score are typically followed by decreases in the number of observed behaviors.

A study conducted by Kundert and May (1990) examined the ability of the DIAL-R to predict academic achievement. Students were administered this test prior to kindergarten and then assessed on the Iowa Test of Basic Skills at the end of second grade. The results showed the DIAL-R was a valid predictor of school success. The DIAL-R total score was the most effective predictor of achievement. Due to the small sample size, the researchers cautioned the results should be considered tentative and further studies were suggested with a larger sample.

The Miller Assessment for Preschoolers is individually administered to children 2 years, 9 months to 5 years, 8 months. The test consists of twenty-seven items that assess performance in the following areas: sensory and motor, cognitive and combined abilities. The test materials are contained in a carrying case and consist of over seventy-one items.

Although the manual states the test may be administered and scored in twenty to thirty minutes, this estimated time may be valid only after extensive practice and review. The Draw-A-Person Test, for example, would require sufficient practice and experience in order to thoroughly evaluate the quality of the response.

Specific directions for administering and scoring the items are located in the manual. The manual also lists detailed information for each test item including: materials, procedure, scoring, observations and age specific information. The total score yields information relating to the following classifications: red/stop--child needs further evaluation, yellow/caution--child should be watched carefully, green/go--child appears to be within normal limits. A percentile score is also available for each of the Performance Indices which may be used to determine developmental growth on a pre/post test format.

A report on the predictive validity of the MAP (American Occupational Therapy Association, 1986) focused on 338 children from the original sample of

1,204 preschoolers, and their level of achievement four years later. Six standardized tests, including the Wechsler Intelligence Scale for Children-Revised, the Woodcock-Johnson Psychoeducational Battery and the Developmental Test of Visual Motor Integration were administered. Informal data was also collected from teacher and parent ratings and school records that documented retentions, grades and special education services. Results indicated that preschoolers who received a low score on both the individual subtests and the total test score were more likely to be experiencing difficulty in school. The test cutoffs indicating that the student be watched or referred for an evaluation were effective in identifying potential students that may need to be considered for exceptional education.

Alternate solution strategies to screen preschool students were considered based on research that addressed difficulty with reading acquisition. The manifestations of a specific learning disability are generally recognized in the early elementary grades

when students experience difficulty with reading. Research conducted by Liberman (1987) provides evidence that deficits in language-related skills, specifically in the phonological process, are the contributing factor for students who experience difficulty in acquiring reading skills. An early study tested the ability of preschool children to divide words into phonemes, one of the smallest units of speech and syllables. Results showed student experienced difficulty counting the phonemes although they had been exposed to the alphabet throughout the school year. Lundberg, as quoted by Liberman (1987:3) also found similar results, "the ability to segment words into phonemes, was the single most powerful predictor of future reading and spelling skills in a group of children tested at the end of their kindergarten year." Liberman provided suggestions for incorporating this information at both the college level where teachers are receiving training, and within the school systems where children first encounter their difficulty in reading.

Bradley (1987) studied the relationship between rhyme recognition and the development of phonological awareness. The initial study involved 62 children of average or above intelligence who were reading two years below level. The students were asked to complete three tasks: 1. the student listened to four words and identified the "odd" word, or the word that did not rhyme; 2. the students were asked to generate rhymes for ten words; 3. the student was shown a card with four words, and asked to identify the "odd" word. The control group consisted of 30 younger students with the same intelligence level, who were not experiencing difficulty in reading. The results showed, "the young normal readers were far superior at categorizing sounds and detecting rhymes in spoken words,. . . even though the backward readers were, on average, three and a half years older . . ." (Bradley, 1987: 65). Additional studies and training showed the ability to recognize rhyming patterns has an influence on later success in reading and spelling.

Repeated consultations with both the SLD and LSH Program Specialists were necessary to formulate a plan to identify these students as the countywide teacher was not directly assigned to work with either the SLI staff or student population. Team involvement was crucial in generating ideas that encompassed divergent points of view. Critical thinking and problem-solving strategies that externalize the thinking process were effective (Heiman, 1986). The potential for improved outcomes when "better thinking" skills are developed include, ". . . considers more possibilities, ...marshals more data, ...challenges more assumptions..." (Schwartz, 1990:4).

Increasing SLD identification within the preschool age group was accomplished through a combination of strategies that were created to meet the unique needs of the SLI preschool population and the demands of the countywide position. Although these students are already placed into special education, they remain at-risk for a specific learning disability. Procedural concerns focused on the feasibility of acquiring

parental permission for evaluations, completing the diagnostic assessments and conducting staffings into the Specific Learning Disabilities program within a three month period.

The implementation plan for the practicum involved the close cooperation of the SLI teachers in the following areas: 1. providing background information for students they were concerned about; 2. sharing information regarding their training and experience with SLD students; 3. stating academic and behavioral indicators that suggest the presence of a disability. An informal survey, as suggested by Anderson and Coleman, was designed to measure changes in the teachers' awareness of the indicators. It was anticipated that information acquired from the above areas would be beneficial for future training in both programs.

The SLI students who appeared at-risk were referred to the countywide SLD teacher. The county level screening program included assessments, observations, interviews with the SLI teacher and a

review of the cumulative folder. Assistance was provided by the SLD Program Specialist in reviewing the assessment instruments. The DIAL-R was selected as the assessment instrument after considering reliability, validity, norms and standardization, cost and ease of administration (Kundert and May, 1990). Students receiving a low score on the DIAL-R screening were referred for additional evaluations. In order to qualify for services, both a processing deficit and a discrepancy between ability and current academic performance must be documented. The Woodcock-Johnson Tests of Cognitive Ability-Revised (WJ-R) was administered to determine if the student exhibited signs of a processing deficit (Woodcock, 1990). The Test of Early Reading Ability - 2 (TERA) measured the early reading abilities of the preschool students (Reid, 1989). The Test of Early Mathematics Ability - 2 (TEMA) documented the preacademic level of math functioning (Ginsburg, 1990).

Throughout the past year numerous sources have been contacted in an attempt to discover possible

solutions for identifying preschool students at-risk for a specific learning disability. The strategies listed above were created to focus on a specific segment of the ESE population that is at high risk for a learning disability. In order to achieve the mandate of PL 99-457 within the confines of a three month practicum, it became evident that access to students who had a completed psychological evaluation would be crucial. This evaluation is required to determine eligibility for the SLD program, and large caseloads at individual schools may have prevented psychologists from completing the referral within the three month time period. In conjunction with identifying students in need of services, it was hoped that the practicum will identify potential indicators of a specific learning disability found in both the academic areas and language/speech development that will facilitate the referral process in the future.

CHAPTER III

Method

During the first week of the practicum the LSH Program Specialist conducted a meeting with the Pre-K SLI teachers for approximately one hour to provide the rationale for the study and to generate ideas regarding the names of potential students to be evaluated. Through brainstorming techniques the Program Specialist focused on the specific problems the students were experiencing. Problem solving strategies were incorporated to develop a list of academic and behavioral indicators that suggested these students were at-risk for a specific learning disability. The LSH Program Specialist consulted with the writer to discuss information regarding the three Pre-K SLI teachers, 11 students and school sites involved.

The writer was responsible for contacting the SLI teachers to confirm the names of students referred, coordinate permission for evaluation and discuss appropriate times to visit the site. The SLD Program Specialist contacted the building principals to explain

the purpose of the study and the tentative schedule for evaluations. Advance notice of two or three weeks was sufficient to reserve a room for the evaluations at each site. The writer was available to confer with parents who expressed concerns to the SLI teacher about the assessment process. Overall, the parents were willing to participate in the study because they recognized the difficulty their child was likely to encounter in kindergarten.

The first week of implementation also included an hour-long training session on the DIAL-R assessment instrument conducted by the writer. The purpose of this session was to train the second countywide teacher to assist with the evaluations at the first site. This teacher administers SLD diagnostic evaluations for the county Admissions Team which is responsible for re-evaluating students transferring into the county to ascertain if they meet the criteria for continued placement. Admissions Team is experiencing difficulty in finding appropriate assessment instruments that

detect the presence of a specific learning disability in students five years of age or younger.

In order to develop a rapport with the SLI teacher and target students, the writer scheduled two visits at each site during the first week, followed by weekly visits thereafter. The schedule followed a similar pattern at the three target locations beginning the second week with the informal survey (Appendix A:51), the review of the cumulative record, the student observations and conferences with the SLI teacher. Specific information pertaining to each target student was recorded on the Preschool Interview Form (Appendix C:56). It was necessary to provide a format that facilitated acquiring similar information from all three target sites. The writer was also responsible for compiling information from the existing speech/language and psychological evaluations to assist with the development of potential indicators of a learning disability. Approximately two hours per student was needed to accomplish these activities.

The DIAL-R screening was also conducted during the second week. The schedule incorporated the use of two countywide teachers functioning as an evaluation team, to assure a smooth and orderly process during the orientation phase to this age-group and new diagnostic instrument. The test administration, scoring and evaluation required at least two hours per student. During the third week the writer administered individual processing tests to those students who were at-risk based on their performance and total score on the DIAL-R. Test administration of the Woodcock-Johnson Cognitive Abilities-R and scoring required one hour per student. The TEMA and TERA tests were administered the fourth week to determine the student's preacademic level of functioning.

An evaluation of the program was scheduled during the fifth week. The writer conferred with the SLI teacher to determine if the allotted time had been sufficient to complete the evaluations for the first target site. A schedule revision for the remaining sites was unnecessary due to the availability of the

second countywide teacher to assist with the DIAL-R screenings. The writer problem solved with the target teacher to discuss potential indicators of a specific learning disability found within the first group of preschoolers. The data was examined to evaluate how effective the DIAL-R was in confirming the presence of a disability. The possibility existed that a mid-course review of students who had been screened would warrant the consideration of another assessment instrument. The SLD Program Specialist and writer agreed the information gained from the DIAL-R screenings supported the continued use of this assessment instrument.

Student test results, observations and current performance were reviewed with the SLD Program Specialist to determine the number of students who qualified for SLD services. When reviewing the information the writer expressed concern that the psychological evaluations, completed two years ago, described performance and behavior that varied significantly from the recently completed assessments.

The site was requested to provide updated psychological evaluations prior to making placement decisions into the specific learning disabilities program.

Implementation at the second target site occurred during the sixth through the eighth week. To accommodate the needs of preschoolers for multiple assessment sessions of short duration, the countywide teacher scheduled a half-day session per week at each site. This enabled the writer to work with a target student, return the student to the classroom for a break and resume activities with the same student later that morning. The activities that occurred during the initial visit of the sixth week included: the target student observations, conferences with the SLI teacher, the informal survey and review of the cumulative record. The countywide teachers administered the DIAL-R assessments during the second visit to the site at the end of the sixth week.

Individual processing evaluations were completed during the seventh week with the use of the WJ-R. The writer administered the TEMA and TERA during the eighth

week to determine the math and prereading level of functioning for each student. The approximate time for completing the evaluations were two-to-three hours per student.

The evaluation process that occurred the fifth week was repeated when the assessments were completed the eighth and eleventh week. This process assisted the SLI teacher, SLD Program Specialist and writer in monitoring the activities as the work concluded at each site. Although an opportunity to modify the implementation process was provided if needed, it was unnecessary based on the data collected from the target sites. All components previously described were addressed during the evaluation, including: a review of the testing schedule, determining the effectiveness of the DIAL-R, identifying the number of students who qualify for SLD services and problem solving with the SLI teachers.

The third target site participated in the implementation process during the ninth to eleventh week. The activities previously described were

conducted during two visits on the ninth week. They included: conferences with the SLI teacher, student observations, a review of the cumulative record, the informal survey and the DIAL-R assessments. Diagnostic assessments that occurred during the tenth and eleventh week included the WJ-R, TEMA and TERA. The eleventh week also incorporated the evaluation process that has been mentioned previously.

During the twelfth week the writer conferenced with the target teachers and program specialists to review the results of the practicum. It was anticipated that the final results of the informal survey would show an increased awareness of potential academic and behavioral indicators that suggest the student is at-risk for a specific learning disability. The meeting generated ideas for sharing this information with the SLI teachers who did not participate in the study. The discussion also addressed the use of the DIAL-R total score as a potential indicator to examiners that further evaluations may be warranted. Finally, the number of

students who qualified for SLD services and possible service options were discussed.

CHAPTER IV

Results

The first objective of the practicum utilized critical thinking skills and problem-solving strategies to increase teacher awareness of academic and behavioral indicators of a specific learning disability within the preschool population. This was measured by an informal survey completed by the SLI teachers at the beginning and end of the implementation period (Appendix A:51). When the evaluations at each site concluded, the writer met with the SLI teacher to generate ideas regarding patterns of difficulty as evidenced by the test results. Additionally, the writer and SLI teacher compared information on the PRE-K SLI interview form (Appendix C:56) with information from the evaluations and cumulative record. The informal survey indicated the SLI teachers showed an increase of 50 percent in their awareness of potential academic and behavioral indicators of a specific learning disability.

During the twelfth week of the practicum the writer conferred with the professionals who participated in the study to discuss the results and develop a list of potential Pre-Kindergarten indicators of a specific learning disability. The PRE-K SLI target students, ages four and five, displayed difficulty in the following prereading skills, including: naming colors and letters, sorting by color, shape, or size and identifying concepts. Early math skills that reflected a student at-risk included: difficulty naming numbers, inability to count by rote, the lack of one-to-one correspondence and problems in identifying sets that have "more."

A review of the cumulative record indicated similar patterns shared by the target students in the following areas: medical history, gross and fine motor skill development and family background. Chronic ear infections were evidenced in eight of the eleven target students with four students requiring the implantation of tubes. Certainly the intermittent hearing loss experienced by these students would greatly increase

their risk factor for both speech-language and preacademic development. Delays in gross and fine motor development were documented throughout the entire target group population. Many target students were unable to skip, hop on one foot without assistance, or catch a ball. Seven students were functioning significantly lower than their chronological age and expected level of skill development and qualified for services from an occupational therapist. Finally, the social histories reported family members of seven target students experienced difficulties in either their academic or speech-language development.

The evaluation of the second objective was accomplished by reviewing the students individually to determine if 50 percent of the target group met the eligibility criteria for inclusion in the SLD program. The team considered information from the psychological evaluation, the DIAL-R, WJ-R, TEMA, TERA and current performance in the classroom. In order to qualify for SLD services the student must show evidence of a processing deficit and their level of preacademic

functioning must be significantly lower than the assessed level of intellectual functioning. The evaluations indicated that over 80 percent of the preschool SLI students met the eligibility criteria for inclusion in the Specific Learning Disabilities program.

Information obtained from the Early Developmental Scale of the Woodcock-Johnson Tests of Cognitive Ability-Revised provided a clear indication of where each student was experiencing difficulty in processing. The Early Developmental Scale consists of five tests that measure the following areas: long-term retrieval, short-term memory and attention, auditory processing, visual processing and comprehension-knowledge. The writer has included a profile of the standard scores for five target students that indicate unique patterns illustrating their strengths and weaknesses (Appendix D:60). Although the target students have average or above intelligence their processing scores are significantly below their expected level of functioning. The processing evaluations will provide

information for appropriate program planning for both the SLI and SLD teachers.

The third and fourth objectives were evaluated through an informal survey completed by the participants at the end of the implementation period. Ninety percent of the participants agreed the practicum was beneficial and the use of the DIAL-R was appropriate for determining students at-risk for a learning disability. The SLI teachers played an integral part in the practicum with the generation of names of target students who appeared to be at-risk. The countywide referral process provided extensive information to the referring SLI teachers that in most cases supported their impressions about the target students and would assist in program planning.

The participants found the DIAL-R was appropriate for the Pre-K age group; it provided a screening for the areas it was intended to and was helpful in identifying preschool students at-risk for a learning disability. The target students enjoyed the activities and the presentation of materials held their interest

throughout the sessions. The total score of the DIAL-R was not the determining factor when referring students for processing evaluations. Participation in the SLI program for a year or longer may have inflated the total score of the target students. The SLI preacademic curriculum encompasses many of the same skills that the DIAL-R was evaluating. The DIAL-R scoresheet provides a graph with corresponding ages for every task measured within the motor, concepts and language areas. Decisions to proceed with processing evaluations were based on the specific information from each test item in conjunction with the examiner's impressions regarding the degree of difficulty experienced by the target student.

Successful implementation of the project increased the identification of Pre-K students at-risk for a specific learning disability, examined preacademic indicators found within the preschool SLI population and identified appropriate diagnostic procedures and assessment instruments. The target students will continue with their placement in the SLI program for

kindergarten. Additionally, they will receive support services from the SLD program. Cooperative program planning, early intervention and direct services from both the SLI and SLD program will enhance the developmental and educational gains of these students.

CHAPTER V

Recommendations

Increasing the identification of Pre-K students at-risk for a specific learning disability was achieved through the successful implementation of the project. Results of the practicum suggest the appropriateness of the continued use of the DIAL-R with this age-group to assess student's development within the motor, cognitive and language areas. The DIAL-R was the only assessment instrument utilized that evaluated gross and fine motor development. The importance of this information was apparent when over half of the target students exhibited significant delays in their gross and fine motor functioning. The SLD program will be involved with additional support and training on this assessment instrument.

The practicum provided a systematic plan to identify the potentially large number of Pre-K students with a language disability that later experienced academic difficulties. The target population consisting of 11 students, encompassed a broad range of

abilities that facilitated the development of potential indicators of a specific learning disability. The SLI teachers were an integral component of the project with their selection of students referred for the countywide evaluations. Disseminating this information to all Pre-K SLI teachers would enhance the referral process for SLD services in the future. The SLD program may coordinate a spring referral process involving both the SLI Pre-K teachers and the SLD countywide teachers.

Information acquired from the review of recent literature regarding assessment practices and procedural concerns when evaluating prekindergarten students will be shared with the SLD staff. The format may involve discussions at the monthly meeting, inservice activities and compiling information to include in the SLD manual. The SLD department will also develop guidelines for a curriculum that address the specific needs of this age-group.

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Appendices

Appendix A

Pre/Post SLI Survey

Appendix A

Pre/Post SLI Survey

Please rate your awareness in the following areas on a scale of 0-4. Circle one item for each statement. Key as follows:

0 Low 1 2 Average 3 4 High

1.	Preacademic indicators of a specific learning disability within the Pre-K population.	0	1	2	3	4
2.	Behavioral indicators of a student at-risk for a learning disability.	0	1	2	3	4
3.	The eligibility requirements for the SLD program for students under age seven.	0	1	2	3	4
4.	Interventions or curriculum modifications appropriate for potential preschool SLD students.	0	1	2	3	4

Please list preacademic and behavioral indicators exhibited by students at-risk for a specific learning disability within the Pre-K SLI classroom.

_____

_____

_____

_____

_____

Appendix B

Pre-K SLI Activity Evaluation

Appendix B

Pre-K SLI Activity Evaluation

Please rate this activity in the following areas on a scale of 0-4. Key as follows:

Circle one number for each item.

0 = No Opinion 1 = Strongly Disagree 2 = Disagree
3= Agree 4 = Strongly Agree

1.	The activity fulfilled its description or objectives.	0	1	2	3	4
2.	The activity was relevant to the needs of the Pre-K SLI group.	0	1	2	3	4
3.	The facilitator was knowledgeable and prepared.	0	1	2	3	4
4.	I had an opportunity to get involved, ask questions and offer suggestions.	0	1	2	3	4
5.	The activity was educationally beneficial for both classroom and countywide purposes.	0	1	2	3	4
6.	The DIAL-R test assessed the areas that it was intended to.	0	1	2	3	4
7.	The presentation of the DIAL-R materials was appropriate for the Pre-K age-group.	0	1	2	3	4
8.	The DIAL-R was helpful in identifying preschool SLI students at-risk for a learning disability.	0	1	2	3	4

Appendix B (continued)

9.	Information obtained from the DIAL-R supported the areas of concern raised by the SLI teacher.	0	1	2	3	4
10.	The total score of the DIAL-R was beneficial in identifying students in need of processing evaluations.	0	1	2	3	4

Appendix C

Pre-K SLI Interview

Appendix C

Pre-K SLI Interview

Date_____

Student_____ _____D.O.B._____Sex_____

School_____Teacher_____

Length of Time Student Attended_____

Is Child Absent Often?_____If yes, why?_____

What do you consider the major problem for this child?

_____

_____

In what areas does this child excel?_____

_____

Check the areas where problems are apparent:

_____Social _____Self-Help _____Cognition

_____Memory _____Fine Motor _____Gross Motor

_____Behavior _____Speech/Lang. _____Attention

Please check skill deficiencies you have observed:

_____Visual Discrimination _____Enunciation of words

_____Visual Recall _____Length of Sentences

_____Following Directions _____Tells Story in Sequence

_____Auditory Discrimination _____Comprehension

_____Auditory Recall _____Numbers/Counting

_____Concrete Concept

Appendix C (continued)

School Adjustment/Classroom Behavior

Does he/she seem to like school?_____

How does he/she react to success?_____

How does he/she react to failure?_____

Check any characteristics which apply (1 x=mild; 2 x=moderate; 3 x=severe)

_____Refuses to go to school	_____Fearful
_____Difficulty with coloring	_____Boastful
_____Overly talkative	_____Cries easily
_____Runs away from school	_____Daydreams
_____Low frustration tolerance	_____Shy
_____Restless or overactive	_____Steals
_____Difficulty in concentrating	_____Withdraws
_____Disturbs other children	_____Interrupts
_____Temper outbursts	_____Oversensitive
_____Short attention span	_____Tattles
_____Excessive physical complaints	_____Selfish
_____Ignores directions	_____Overly serious
_____Can't sit still	_____Sullen or sulky
_____Overly neat	_____Excitable
_____Acts "smart"	_____Destructive
_____Touches or hits others	_____Distractible
_____Clowns around	_____Impulsive
_____Fights	_____Depressed

_____Other_____

Handedness (circle one) R L Mixed

Nervous habits (check):

_____Hand tremors	_____Tics
_____Nail biting	_____Finger/Thumb sucking
_____Bladder/bowel	

Appendix C (continued)

Any other information or comments you wish to add:

_____

_____

Adapted from PATH (1989). Student Evaluation Manual. Tallahassee, Florida

Appendix D

Woodcock-Johnson Profile

Appendix D

Woodcock-Johnson Early Developmental Profile

Test	Student 1	Student 2	Student 3
Mem./Names	102	68	68
Mem./Sent.	80	59	84
Inc. Words	68	86	91
Visual Closure	101	95	109
Pict. Vocab.	73	76	110
IQ RANGE	89	93-99	82-88
TEMA-2	85 Below Avg.	65-Poor	85 Below Avg.
TERA-2	85 Below Avg.	75-Poor	90

Test	Student 4	Student 5
Mem./Names	81	95
Mem./Sent.	55	66
Inc. Words	57	93
Visual Closure	115	101
Pict. Vocab.	110	84
IQ RANGE	101	87-93
TEMA-2	87 Below Avg.	87 Below Avg.
TERA-2	88 Below Avg.	79-Poor